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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,783	09/08/2003	Mohammad M. Samii	200210011-1	1348

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EXAMINER

PATEL, NIRAV B

ART UNIT	PAPER NUMBER
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2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/657,783	Applicant(s) SAMII ET AL.	
	Examiner Nirav Patel	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213:

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 7-12, 14, 19, 20, 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13, 15-18, 21, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the communication filed on 11/20/2006.
2. Applicant's election without traverse of the elected Species I, claims 1-6, 13, 15-18, 21, 25 and 26, in the reply filed on 11/20/06 is acknowledged. Claims 7-12, 14, 19, 20, 22-24 are drawn to nonelected species, thus withdrawn from further consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6, 13, 15, 21, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashige (US Pub. No. 2002/0171862) and in view of Suzuki (US Pub. No. 2003/0169456).

As per claim 1, Nagashige discloses:

extracting print-mark data corresponding to a print mark on a hardcopy of printed material from data corresponding to the hardcopy of printed material [Fig. 2-4, paragraph 0023 lines 1-5, paragraph 0026 lines 1-10, Fig. 1, 5].

Further, Nagashige teaches determining the remaining mark amount from the hardcopy of printed material resulting from printing variations occurring during printing of the

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hardcopy of printed material [paragraph 0068 lines 10-12, Fig. 1-5], encrypting the generation control information, which is created from the remaining mark amount information [paragraph 0089 lines 4-5] and printing the generation control information as a barcode on the printed material [Fig. 5].

Suzaki teaches:

analyzing the print-mark data to quantify printing artifacts of the print mark resulting from printing variations occurring during printing of the hardcopy of printed material [Fig. 4-13, paragraph 0055, 0056, 0057 lines 1-19]; encrypting the quantified printing artifacts [paragraph 0057 lines 19-21]; encoding the encrypted printing artifacts into data corresponding to a machine-readable identifier [paragraph 0057 lines 26-29]; and printing the machine-readable identifier from the data corresponding to the machine-readable identifier on the hardcopy of printed material [paragraph 0057 lines 26-29, 0058].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Suzaki with Nagashige, since one would have been motivated to provide a tampering judgment for verifying the information contained in the printed document [Suzaki, paragraph 0010 lines 2-4].

As per claim 6, the rejection of claim 1 is incorporated and Nagashige teaches:

printing the machine-readable identifier comprises printing a barcode [Fig. 5, paragraph 0079 lines 6-11]

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Suzaki teaches printing the machine-readable identifier comprises printing a barcode [paragraph 0057 lines 27-29].

As per claim 13, it is an apparatus claim corresponds to a method claim 1 and is rejected for the same reason set forth in the rejection of claim 1 above.

As per claim 15, it is a computer-usable media claim corresponds to a method claim 1 and is rejected for the same reason set forth in the rejection of claim 1 above.

As per claim 21, Nagashige discloses:

a first printer adapted to print a hardcopy of printed material having a print mark [Fig. 2, 3, 5]; a scanner for scanning the hardcopy of printed material and outputting data corresponding to the printed material [Fig. 2, 4]; a computer connected to the scanner that is adapted to perform a method in response to receiving the data corresponding to the printed material from the scanner [Fig. 2, 4], the method comprising extracting print-mark data corresponding to a print mark on a hardcopy of printed material from data corresponding to the hardcopy of printed material [Fig. 2-4, paragraph 0023 lines 1-5, paragraph 0026 lines 1-10, Fig. 1, 5].

Further, Nagashige teaches determining the remaining mark amount from the hardcopy of printed material resulting from printing variations occurring during printing of the hardcopy of printed material [paragraph 0068 lines 10-12, Fig. 1-5], encrypting the generation control information, which is created from the remaining mark amount

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information [paragraph 0089 lines 4-5] and printing the generation control information as a barcode on the printed material [Fig. 5].

Suzaki teaches:

analyzing the print-mark data to quantify printing artifacts of the print mark resulting from printing variations occurring during printing of the hardcopy of printed material [Fig. 4-13, paragraph 0055, 0056, 0057 lines 1-19]; encrypting the quantified printing artifacts [paragraph 0057 lines 19-21]; encoding the encrypted printing artifacts into data corresponding to a machine-readable identifier [paragraph 0057 lines 26-29]; converting the data corresponding to the machine-readable identifier into printer-usable data and printing the machine-readable identifier from the data corresponding to the machine-readable identifier on the hardcopy of printed material [paragraph 0057 lines 26-29, 0058, Fig. 2].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Suzaki with Nagashige, since one would have been motivated to provide a tampering judgment for verifying the information contained in the printed document [Suzaki, paragraph 0010 lines 2-4].

As per claim 25, it encompasses limitations that are similar to those of claim 21. Thus, it is rejected with the same rationale applied against claim 21 above.

As per claim 26, it encompasses limitations that are similar to those of claim 21. Thus, it is rejected with the same rationale applied against claim 21 above.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashige (US Pub. No. 2002/0171862) in view of Suzuki (US Pub. No. 2003/0169456) and in view of Delman et al (US Patent No. 6,655,579).

As per claim 2, the rejection of claim 1 is incorporated and Nagashige and Suzuki teaches printing the machine-readable identifier from the data corresponding to the machine-readable identifier on the hardcopy of printed material [Fig. 5 of Nagashige, paragraph 0057 lines 26-29, 0058 of Suzuki].

Nagashige and Suzuki do not expressively mention printing the machine-readable identifier around a periphery of the print mark.

Delman teaches printing the machine-readable identifier around a periphery of the print mark [Fig. 3a, 4b].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Delman with Nagashige and Suzuki, since one would have been motivated to provide an authenticity of the printed material [Delman, col. 7 lines 5-10].

5. Claims 3, 4, 5, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashige (US Pub. No. 2002/0171862) in view of Suzuki (US Pub. No. 2003/0169456) and in view of Berson et al (US Patent No. 5,388,158).

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As per claim 3, the rejection of claim 1 is incorporated and Suzuki teaches encrypting the quantified printing artifacts [paragraph 0057 lines 19-21].

Berson teaches encrypting using a private key [col. 3 lines 45-51].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Berson with Nagashige and Suzuki, since one would have been motivated to produce secure document and authenticate the document [Berson, col. 1 lines 46-47].

As per claim 4, the rejection of claim 3 is incorporated and Berson teaches:

the private key is linked to a public key used for decrypting the encrypted quantified printing artifacts [col. 3 lines 45-51, col. 2 lines 33-37].

As per claim 5, the rejection of claim 1 is incorporated and Berson teaches:

encrypting the quantified printing artifacts comprises using RSA encryption or elliptic-key encryption [col. 3 lines 45-51].

As per claim 16, the rejection of claim 15 is incorporated and it is a computer-usable media claim corresponds to a method claim 3 and is rejected for the same reason set forth in the rejection of claim 3 above.

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As per claim 17, the rejection of claim 15 is incorporated and it is a computer-usable media claim corresponds to a method claim 5 and is rejected for the same reason set forth in the rejection of claim 5 above. ◇

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagashige (US Pub. No. 2002/0171862) in view of Suzuki (US Pub. No. 2003/0169456) and in view of Hayduchok et al (US Patent No. 6,151,422).

As per claim 18, the rejection of claim 15 is incorporated Hayduchok teaches: converting the data corresponding to the scanned printed material into gray-scale data before analyzing the data [Fig. 7, col. 4 lines 60-67].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Hayduchok with Nagashige and Suzuki, since one would have been motivated to verify the information contained in the printed document [Suzaki, paragraph 0010 lines 2-4].

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kargman (US 20020067827) --- Method for preventing check fraud

Takahashi (US 6972856) – Querying of copyright host, printing of copyright information and host registration of copyright data

Durst et al (US 7162035) --- Authentication method and system

Yen et al (US 7017816) --- Extracting graphical bar codes from template-based documents

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav Patel whose telephone number is 571-272-5936. The examiner can normally be reached on 8 am - 4:30 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

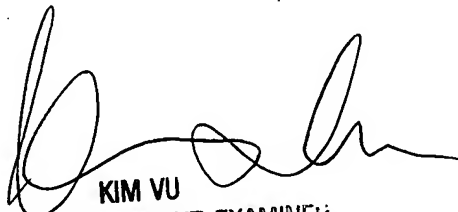
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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NBP

2/1/07



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